

We Claim:

1. A method for determining a portion of total costs for each entity of a plurality of entities, the total costs relating to a total maximum number of accesses of all the entities occurring in a predetermined time window over a time interval having a plurality of time windows, to a product, and there exists a predetermined relationship between the total maximum number of accesses of all the entities and the total costs, the method which comprises the steps of:

obtaining, for each of the entities, a maximum value relating to a maximum number of accesses of the entity in all the time windows over the time interval resulting in a group of maximum values for the plurality of entities;

finding a smallest maximum value among the group of maximum values for all the entities;

distributing costs for the smallest maximum value among all the entities having access to the product in the time interval;

finding a next-higher maximum value among the group of maximum values;

determining a difference in costs for the smallest maximum value and the next-higher maximum value from the predetermined relationship;

distributing the difference in costs among the entities having an equivalent or a higher maximum value than the next-higher maximum value;

repeatedly finding a further next-higher maximum value among the group of maximum values and distributing a determined difference in costs for the further next-higher maximum value among the entities having an equivalent or a higher maximum value;

accumulating the costs obtained in the steps of distributing for each of the entities individually to obtain an accumulated cost result; and

outputting the portion of the total costs for each of the entities based on the accumulated cost result for each of the entities.

2. The method according to claim 1, which comprises calculating the total costs by combining the total maximum numbers of accesses in more than one time interval, in which the maximum value for each of the entities obtained in the

obtaining step is calculated by using a maximum of the maximum number of accesses in the more than one time interval as the maximum value for the entity for the more than one time interval.

3. The method according to claim 2, which comprises performing the repeatedly finding step until a highest maximum value among the entities is processed in a case where the total maximum number of accesses of all the entities is equal to the maximum value of a single one of the entities.

4. The method according to claim 1, wherein in a case where the total maximum number of accesses is produced by more than one of the entities, performing the following steps before performing the outputting step:

calculating a residual cost being a difference between the total maximum number of accesses and a highest maximum value of a single one of the entities; and

distributing the residual cost among all the entities equally, and the portion of the total costs for each of the entities equals the accumulated cost result plus a part of the residual costs distributed to each of the entities.

5. The method according to claim 1, which comprises:

organizing at least one of the entities into a plurality of sub-entities;

providing a maximum value of accesses for each of the sub-entities; and

distributing the portion of the total costs of the entity among the sub-entities based on percentage ratios derived from the predetermined relationship.

6. The method according to claim 5, which comprises performing the distributing of the portion of the total costs of the entity step with the following sub-steps:

calculating a ratio of the costs for the maximum value of a sub-entity to the costs for the maximum value of the entity from the predetermined relationship;

calculating a cost amount by multiplying the ratio by the portion of the total costs for the entity; and

distributing the cost amount among the sub-entities having a maximum value equal to or greater than the maximum value, on which the cost amount is based.

7. The method according to claim 1, which comprises setting the costs to be license costs for the product.

8. The method according to claim 1, which comprises forming the entities as cost centers.

9. The method according to claim 5, which comprises forming the entities as business units, and the sub-entities as cost centers.

10. The method according to claim 1, which comprises:

allowing a plurality of users to have access to the product;

attributing each of the users to one of the entities; and

performing the obtaining steps to include the following sub-steps:

counting a number of accesses of the users attributed to the entity in subsequent time windows to obtain a series of access numbers for the time interval; and

searching for a maximum access number in the series to obtain the maximum value for the entity in the time interval.

11. A method for determining a portion of total costs for each entity of a plurality of entities, the total costs relating to a total maximum number of accesses for all of the entities occurring in a predetermined time window over a time interval having a plurality of time windows, to a product, and there exists a predetermined relationship between the total maximum number of accesses of all the entities and the total costs, the method which comprises the steps of:

obtaining, for each of the entities, a maximum value relating to a maximum number of accesses of the entity in all the time windows over the time interval resulting in a group of maximum values;

finding a highest maximum value among the group of maximum values for the entities;

finding a next-lower maximum value among the group of maximum values;

determining a difference in cost for the highest maximum value and the next-lower maximum value from the predetermined relationship;

distributing the difference in cost to the entity having the highest maximum value;

repeatedly finding another next-lower maximum value among the group of maximum values and distributing a determined difference for the next-lower maximum value among the entities having an equivalent or a higher maximum value; and

accumulating the costs obtained in the steps of distributing for each of the individual entities to obtain an accumulated cost result and outputting the portion of the total costs for each of the entities based on the accumulated result for each of the entities.

12. An apparatus for determining a portion of total costs for each entity of a plurality of entities, the total costs relating to a total maximum number of accesses of all the entities occurring in a predetermined time window over a time interval having a plurality of time windows, to a product, and there exists a predetermined relationship between the total maximum number of accesses of all the entities and the total costs, the apparatus comprising:

a processing unit programmed to:

obtain, for each of the entities, a maximum value relating to a maximum number of accesses of the entity in all time windows over the time interval resulting in a group of maximum values;

find the smallest maximum value among the group of maximum values for the entities;

distribute costs for the smallest maximum value among all the entities having access to the product in the time interval;

find a next-higher maximum value among the group of maximum values;

determine a difference in costs for the smallest maximum value and the next-higher maximum value from the predetermined relationship;

distribute the difference in costs among the entities having an equivalent or a higher maximum value than the next-higher value;

repeatedly find a further next-higher maximum value among the entities and distribute a determined difference in costs for the further next-higher maximum value among the

entities having an equivalent or a higher maximum value;
and

accumulate costs obtained for each of the entities
individually to obtain an accumulated cost result and
output the portion of the total costs for each of the
entities based on the accumulated result for each of the
entities.

13. An apparatus for determining a portion of total costs for
each entity of a plurality of entities, the total costs
relating to a total maximum number of accesses of all the
entities occurring in a predetermined time window over a time
interval having a plurality of time windows, to a product, and
there exists a predetermined relationship between the total
maximum number of accesses of all the entities and the total
costs, the apparatus comprising:

a processing unit programmed to:

obtain, for each of the entities, a maximum value
relating to a maximum number of accesses of the entity in
all the time windows over the time interval resulting in
a group of maximum values for the entities;

find the highest maximum value among the group of maximum values for the entities;

find a next-lower maximum value among the group of maximum values;

determine a difference in cost for the highest maximum value and the next-lower maximum value from the predetermined relationship;

distribute the difference costs to the entity having the highest maximum value;

repeatedly find another next-lower maximum value among the group of maximum values and distributing a determined difference for the another next-lower maximum value among the entities having an equivalent or a higher maximum value; and

accumulate the costs obtained for each of the entities individually to obtain an accumulated cost result and output the portion of the total costs for each of the entities based on the accumulated result for each of the entities.